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C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.120.10.d 10 O'Clock (PEER 15) Sweep Tests

C-A-OPM Procedures in which this Attachment is used.		
4.120.10		

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
_____	_____	_____	_____
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V. Castillo

Approved: Signature on File
Collider-Accelerator Department Chairman Date

4.120.10.d 10 O'Clock (PEER 15) Sweep Tests

PASS ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title: _____ Checksum: _____

Division B Software Filename and Checksum: Title: _____ Checksum: _____

Initial testing complete:

Test Team Leader's Name (Print): _____ Life Number: _____

Test Team Leader's Name (Sign): _____ Date: ____/____/____

Acceptance test procedure complete (following repairs and retesting if required):

Test Team Leader's Name (Print): _____ Life Number: _____

Test Team Leader's Name (Sign): _____ Date: ____/____/____

Test results reviewed by:

Safety Section Head's Name (Print): _____ Life Number: _____

Safety Section Head's Name (Sign): _____ Date: ____/____/____

Test results accepted by Radiation Safety Committee:

RSC Member's Name (Print): _____ Life Number: _____

RSC Member's Name (Sign): _____ Date: ____/____/____

1.1	To Sweep	Zone 9Z1	
	CLOSE	Gates 9GS1-I/O, 9EL1, and 9GI1	
<input type="checkbox"/>	VERIFY	Gates 9GS1-I/O, 9EL1, and 9GI1 are	CLOSED
	RESET	Gate 9EL1	
<input type="checkbox"/>	VERIFY	Gate 9EL1	RESET
	PLACE	Peer 15 in Mode 16	
<input type="checkbox"/>	VERIFY	Peer 15 is in Controlled Access	MODE 16
	ACTIVATE	Check station 9CS1	
<input type="checkbox"/>	VERIFY	Check station 9CS1 indicator (Area Secured)	BLINKS ONCE
	ACTIVATE	Check station 9CS2	
<input type="checkbox"/>	VERIFY	Check station 9CS2 indicator (Area Secured)	BLINKS ONCE
	ACTIVATE	Check station 9CS3	
<input type="checkbox"/>	VERIFY	Check station 9CS3 indicator (Area Secured)	BLINKS ONCE
	ACTIVATE	Check station 9CS4	
<input type="checkbox"/>	VERIFY	Check station 9CS4 indicator (Area Secured)	ON
	EXIT	Gate 9GI1 with Simultaneous Release	
<input type="checkbox"/>	VERIFY	MCR sees Zone 9Z1	SWEPT

☐ **Check for test acceptance of Sweep of Zone 9Z1**

1.2	To Sweep	Zone 10Z1	
	CLOSE	Gates 9GI1-I&O, 10GE1, 10GI1-I&O	
<input type="checkbox"/>	VERIFY	Gates 9GI1-I&O, 10GE1, 10GI1-I&O are	CLOSED
	PLACE	Peer 15 in Mode 16	
<input type="checkbox"/>	VERIFY	Peer 15 is in Controlled Access	MODE 16
	ACTIVATE	Check station 10XCS1	
<input type="checkbox"/>	VERIFY	Check station 10XCS1 indicator (Area Secured)	BLINKS ONCE
	ACTIVATE	Check station 10XCS2	
<input type="checkbox"/>	VERIFY	Check station 10XCS2 indicator (Area Secured)	ON
	EXIT	Gate 10GE1 with Simultaneous Release	
<input type="checkbox"/>	VERIFY	MCR sees Zone 10Z1	SWEPT

☐ **Check for test acceptance of Sweep of Zone 10Z1**

- 1.3 **To Sweep Zone 10Z2**
- | | | | |
|--------------------------|-----------------|--|------------------------|
| | CLOSE | Gates 10GI1-I&O, 10EL1, 10ED1, 11GSI-I&O | |
| <input type="checkbox"/> | VERIFY | Gates 10GI1-I&O, 10EL1, 10ED1, 11GSI-I&O are | CLOSED |
| | RESET | Gate 10EL1, 10ED1 | |
| <input type="checkbox"/> | VERIFY | Gate 10EL1, 10ED1 are | RESET |
| | PLACE | Peer 15 in Mode 16 | |
| <input type="checkbox"/> | VERIFY | Peer 15 is in Controlled Access | MODE 16 |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 10Z1 | NOT SWEPT |
| | ACTIVATE | Check station 10CS5 | |
| <input type="checkbox"/> | VERIFY | Check station 10CS5 indicator (Area Secured) | BLINKS
ONCE |
| | ACTIVATE | Check station 10CS4 | |
| <input type="checkbox"/> | VERIFY | Check station 10CS4 indicator (Area Secured) | BLINKS
ONCE |
| | ACTIVATE | Check station 10CS2 | |
| <input type="checkbox"/> | VERIFY | Check station 10CS2 indicator (Area Secured) | BLINKS
ONCE |
| | ACTIVATE | Check station 10CS3 | |
| <input type="checkbox"/> | VERIFY | Check station 10CS3 indicator (Area Secured) | BLINKS
ONCE |
| | ACTIVATE | Check station 10CS1 | |
| <input type="checkbox"/> | VERIFY | Check station 10CS1 indicator (Area Secured) | ON |
| | EXIT | Gate 10GI1 with Simultaneous Release | |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 10Z2 | SWEPT |
- ☐ **Check for test acceptance of Sweep of Zone 10Z2**

1.4 **Test of retention of sweep with legal opening of gate 9GS1 with Peer 17 in CA, Mode 16, and Peer 15 in CA, Mode, 16 and loss of sweep with illegal opening of gate 9GS1.**

- | | | | |
|--------------------------|---------------|---|----------------|
| | PLACE | Peers 17 & 15 in Controlled Access | |
| <input type="checkbox"/> | VERIFY | Peer 17 is in | MODE 16 |
| <input type="checkbox"/> | VERIFY | Peer 15 is in | MODE 16 |
| <input type="checkbox"/> | VERIFY | The warning lights and LED message on both sides of the gate indicate:
Call MCR for Crossover Amber | ON |
| | SWEEP | Zone 8Z2 | |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 8Z2 | SWEPT |
| | SWEEP | Zone 9Z1 | |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 9Z1 | SWEPT |

- | | | | |
|--------------------------|---------------|---|----------------|
| <input type="checkbox"/> | VERIFY | 9GS1 gatebox lights are as follows: | |
| | | Area Secured (S11) Amber | ON |
| | | Area Secured (S10) Amber | ON |
| | OPEN | Gate 9GS1-I with Simultaneous Release | |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 9Z1 | SWEPT |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 8Z2 | SWEPT |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 17 is in | MODE 16 |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 15 is in | MODE 16 |
| <input type="checkbox"/> | VERIFY | 9GS1 gatebox lights are as follows: | |
| | | Area Secured (S11) Amber | ON |
| | | Area Secured (S10) Amber | ON |
| | CLOSE | Gate 9GS1-I | |
| | OPEN | Gate 9GS1-I with without Simultaneous Release | |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 9Z1 | NOT |
| | | | SWEPT |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 8Z2 | NOT |
| | | | SWEPT |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 15 is in | MODE 16 |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 15 is in | MODE 16 |
| <input type="checkbox"/> | VERIFY | 9GS1 gatebox lights are as follows: | |
| | | Area Secured (S11) Amber | OFF |
| | | Area Secured (S10) Amber | OFF |
| | CLOSE | Gate 9GS1-I | |
- ☐ **Check for test acceptance of retention of sweep with legal opening of gate 9GS1 with Peer 17 in CA, Mode 16 and Peer 15 in CA, Mode 16 and loss of sweep with illegal opening of gate 9GS1**

1.5 Test of retention of sweep with legal opening of gate 9GS1 with Peer 17 in CA, Mode 17, and Peer 15 in CA, Mode 16, and loss of sweep with illegal opening of gate 9GS1

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|--------------------------|---------------|---|----------------|
| | PLACE | Peer 17 in Controlled Access, Mode 17 | |
| <input type="checkbox"/> | VERIFY | Peer 17 is in | MODE 17 |
| <input type="checkbox"/> | VERIFY | Peer 15 is in | MODE 16 |
| <input type="checkbox"/> | VERIFY | The warning lights and LED message on both sides of the gate indicate: | |
| | | Call MCR for Crossover Amber | ON |
| | SWEEP | Zone 8Z2 | |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 8Z2 | SWEPT |
| | SWEEP | Zone 9Z1 | |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 9Z1 | SWEPT |

- | | | | |
|--------------------------|---------------|---|----------------|
| <input type="checkbox"/> | VERIFY | 9GS1 gatebox lights are as follows: | |
| | | Area Secured (S11) Amber | ON |
| | | Area Secured (S10) Amber | ON |
| | OPEN | Gate 9GS1-I with Simultaneous Release | |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 9Z1 | SWEPT |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 8Z2 | SWEPT |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 17 is in | MODE 17 |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 15 is in | MODE 16 |
| <input type="checkbox"/> | VERIFY | 9GS1 gatebox lights are as follows: | |
| | | Area Secured (S11) Amber | ON |
| | | Area Secured (S10) Amber | ON |
| | CLOSE | Gate 9GS1-I | |
| | OPEN | Gate 9GS1-I with without Simultaneous Release | |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 9Z1 | NOT |
| | | | SWEPT |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 8Z2 | NOT |
| | | | SWEPT |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 17 is in | MODE 17 |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 15 is in | MODE 16 |
| <input type="checkbox"/> | VERIFY | 9GS1 gatebox lights are as follows: | |
| | | Area Secured (S11) Amber | OFF |
| | | Area Secured (S10) Amber | OFF |
| | CLOSE | Gate 9GS1-I | |
- ☐ **Check for test acceptance of retention of sweep with legal opening of gate 9GS1 with Peer 17 in CA, Mode 17, and Peer 15 in CA, Mode 16, and loss of sweep with illegal opening of gate 9GS1.**

1.6 Test of retention of sweep with legal opening of gate 9GS1 with Peer 17 in CA, Mode 17, and Peer 15 in CA, Mode 17, and loss of sweep with illegal opening of gate 9GS1.

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|--------------------------|---------------|---|----------------|
| | PLACE | Peers 15 & 17 in Controlled Access, Mode 17 | |
| <input type="checkbox"/> | VERIFY | Peer 15 is in | MODE 17 |
| <input type="checkbox"/> | VERIFY | Peer 17 is in | MODE 17 |
| <input type="checkbox"/> | VERIFY | The warning lights and LED message on both sides of the gate indicate: | |
| | | Call MCR for Crossover Amber | ON |
| | SWEEP | Zone 8Z2 | |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 8Z2 | SWEPT |
| | SWEEP | Zone 9Z1 | |
| <input type="checkbox"/> | VERIFY | MCR sees Zone 9Z1 | SWEPT |
| <input type="checkbox"/> | VERIFY | 9GS1 gatebox lights are as follows: | |
| | | Area Secured (S11) Amber | ON |
| | | Area Secured (S10) Amber | ON |

	OPEN	Gate 9GS1-I with Simultaneous Release	
<input type="checkbox"/>	VERIFY	MCR sees Zone 9Z1	SWEPT
<input type="checkbox"/>	VERIFY	MCR sees Zone 8Z2	SWEPT
<input type="checkbox"/>	VERIFY	MCR sees Peer 15 is in	MODE 17
<input type="checkbox"/>	VERIFY	MCR sees Peer 17 is in	MODE 17
<input type="checkbox"/>	VERIFY	9GS1 gatebox lights are as follows:	
		Area Secured (S11) Amber	ON
		Area Secured (S10) Amber	ON
	CLOSE	Gate 9GS1-I	

	OPEN	Gate 9GS1-I with without Simultaneous Release	
<input type="checkbox"/>	VERIFY	MCR sees Zone 9Z1	NOT
			SWEPT
<input type="checkbox"/>	VERIFY	MCR sees Zone 8Z2	NOT
			SWEPT
<input type="checkbox"/>	VERIFY	MCR sees Peer 15 is in	MODE 17
<input type="checkbox"/>	VERIFY	MCR sees Peer 17 is in	MODE 17
<input type="checkbox"/>	VERIFY	9GS1 gatebox lights are as follows:	
		Area Secured (S11) Amber	OFF
		Area Secured (S10) Amber	OFF
	CLOSE	Gate 9GS1-I	

- ☐ Check for test acceptance of retention of sweep with legal opening of gate 9GS1 with Peer 17 in CA, Mode 17, and Peer 15 in CA, Mode 17, and loss of sweep with illegal opening of gate 9GS1.

END OF TEST PROCEDURE

TTL: Sign for completion of initial testing: _____

Date: ____/____/____

TTL: Sign for completion of final testing: _____

Date: ____/____/____